

REMARKS

Applicant acknowledges the office action of February 25, 2004 in which most of the claims were either allowed or deemed allowable. Non-allowed claims 1-3 and 27 are cancelled. Claim 4 is rewritten as an independent claim thereby making it allowable and removing the objection to claim 5 that depends from claim 4. Claim 28 is also rewritten as an independent claim. Claims that formerly depended on cancelled claim 27 now depend upon claim 28 and they are likewise allowable.

Claim 6 is amended to claim a shift switch parallel counter that converts binary signals into state signals and then allows for adding further binary signals to the state signals and then restoring the altered state signal to its original state and providing a carry bit. An example of the invention of claim 6 is shown in Fig. 1a. Claim 6 is patentable over the cited art on grounds that the reference applied to the claim fails to show or suggest its structure. See Fig. 6 of the reference, Rong Lin ("Fast Multiplier Schemes"). That figure fails to show or suggest the compressor and restore circuits of claim 6 (amended). As such, claim 6 (amended) is patentable over the art applied against it.

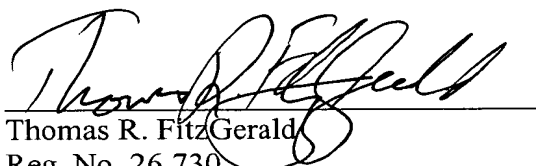
Claim 29-30, 32, 34 and 36 all depend ultimately from allowable claim 28. Thus, the prior rejections under 35 USC Section 102 and 103 based on Rong Lin ("Fast Multiplier Schemes") are moot.

Claim 30 now depends from Claim 28 (amended) and that new dependency overcomes the prior objection under 35 USC Section 112. Now all terms in the claim have proper antecedents.

A notice of allowance is respectfully requested.

Respectfully submitted,

7/23/04
Date


Thomas R. FitzGerald
Reg. No. 26,730

Law Office of Thomas R. FitzGerald
16 E. Main Street, Suite 210
Rochester, New York 14614-1803
Telephone: (585) 454-2250
Fax: (585) 454-6364